

Concern about the overall quality of U.S. education, and in particular about the troublesome gaps in achievement for low-income and minority students, has led many policymakers and parents to demand reform of the educational system. But for reform to make a difference, it must penetrate the classroom and affect the quality of teaching. Almost everyone recognizes the importance of effective teachers, but it is much less clear how to improve the teaching workforce – both increasing the effectiveness of those already teaching and the recruitment of new, high-quality teachers.

Why Does Teacher Effectiveness Matter?

A high-quality education is critical to the future well-being of a child and thus to the nation's future. By one estimate, a high school dropout in the United States will earn nearly a quarter of a million dollars less over his lifetime than a high school graduate who completes no further education. He will also pay \$60,000 less in taxes.

Teachers are so important to student achievement that, according to one estimate, a child in poverty who has a good teacher for five years in a row would have learning gains large enough, on average, to completely close the achievement gap with higher-income students. Improving the quality of teachers is thus crucial to efforts to raise student achievement, narrow achievement gaps, and reduce economic inequality.

Focus of the Volume

Researchers have established that carefully designed public policies can increase the effectiveness of teachers improving student achievement. The articles in this volume explore key tools available to policymakers.

Among the questions the volume asks are:

- How do wages and working conditions both in teaching and in competing occupations influence the number and skills of people drawn to teaching?
- Can certification requirements effectively distinguish between good and bad teachers, and do the requirements drive away potentially good teachers or only the potentially bad?
- What types of professional development programs are most likely to improve teacher effectiveness?
- How do salaries and working conditions affect teacher recruitment, transfer, and turnover?
- What are the challenges and implications of implementing performance-based pay?
- What are the effects of teachers' unions on teacher quality and implementation of new policies?
- How can the unique problems – including poverty, working conditions, and labor markets - facing rural and urban school districts be addressed?
- What are the lessons to be learned from other countries – both developed and developing?

Higher Achievement through Better Teachers: What Works?

Although almost everyone agrees that school reforms are unlikely to improve student performance if they do not directly affect what happens in the classroom, to date there is strikingly little evidence to indicate exactly which policies are most likely to enhance teaching, and thus student learning. But research does point toward some approaches as more effective than others.

Reform Salary Structures. Although some districts offer higher compensation for particular fields of specialization, especially special education, math, and science, that practice is not the norm. In most districts, all teachers in all schools are generally subject to the same salary schedule, leaving some fields and regions with teacher shortages, others with surpluses. A good short-term solution to these staffing problems may be to target large pay incentives for highly effective teachers in hard-to-staff subject areas or less desirable schools. But in the long run, it may be more productive - though expensive - to address working conditions directly by reducing class sizes, providing instructional support, and ameliorating adverse conditions such as crime and dilapidated buildings. Incorporating elements of pay for performance into salary structures is another reform with much theoretical appeal. Although experience with such policies has generated mixed results on student outcomes, much could be learned from carefully designed and implemented pilot programs.

Loosen Certification Requirements. In the absence of solid evidence on the effects of different elements of states' certification requirements, policy must be based on common sense and professional consensus. Researchers have definitively established that entry requirements strongly affect the pool of people interested in teaching. Policies that have loosened entry requirements have not only dramatically increased the number of people interested in teaching but also raised their average academic performance. It is thus crucial to evaluate entry requirements closely, especially in communities that have had trouble attracting qualified teachers.

Re-examine Professional Development. Although professional development can, in theory, benefit schools and districts, so far the nation has little to show for its substantial investment in this area. Hours spent in general and unspecified professional development do not improve instruction. Instead, school systems should only invest in professional development programs that are linked to the curriculum, have substantive content, and be sustained over time. Coaching and release time for directed collaboration among teachers are both promising forms of professional development.

Remove Staffing Restraints. Given how hard it is to identify good teachers, structural constraints that keep schools from removing poorly performing teachers likely hurt students. Easing these restrictions may have large payoffs when an ample supply of potential replacements is available, especially if schools and districts can also offer teachers incentives to improve student learning. Cumbersome bureaucracies also keep many large urban districts from adjusting to changing needs or even making predictable hires in a timely manner. As an example, streamlining the process so that these districts could hire teachers earlier in the year could help increase supply.

Strengthening the teacher workforce is not a one-time policy initiative. The effort must be ongoing - for schools, districts, states, and even the federal government. The introduction of assessment-based accountability systems over the past two decades has yielded a rich harvest of data that can help practitioners and policymakers assess the effectiveness of policy initiatives, especially those that are implemented with an eye toward careful evaluation. Education policy would be well served if reform initiatives were designed from the outset with credible evaluation elements. Without careful evaluation, the nation will continue to commit enormous public resources to one of society's most important investments without any real analytic support.